UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,050	03/02/2004	Janzen Lo	BBM-154US 2830	
23122 RATNERPRES	7590 04/04/2007 STIA		EXAMINER	
P O BOX 980			COMSTOCK, DAVID C	
VALLEY FORGE, PA 19482-0980			ART UNIT	PAPER NUMBER
			3733	
<del></del>				
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	04/04/2007	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	,	Application No.	Applicant(s)			
Office Action Summary		10/791,050	LO ET AL.			
		Examiner	Art Unit			
		David Comstock	3733			
5	The MAILING DATE of this communication app					
Period for Reply						
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depend for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin rill apply and will expire SIX (6) MONTHS from cause the application to become ARANDONE	N. nely filed  the mailing date of this communication.			
Status						
1)🖂	Responsive to communication(s) filed on 22 Ja	nuary 2007.				
	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims	•				
4)⊠	4)⊠ Claim(s) <u>1,2,4-21 and 23-41</u> is/are pending in the application.					
	4a) Of the above claim(s) 2,4-9,12,14-21 and 23-41 is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
	Claim(s) <u>1,10,11 and 13</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
8)□	B) Claim(s) are subject to restriction and/or election requirement.					
Applicati	on Papers					
9) 🗌 🤈	The specification is objected to by the Examiner	:				
	The drawing(s) filed on <u>10 April 2006</u> is/are: a)[		by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	nder 35 U.S.C. § 119					
12) 🔲 ,	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
	1. ☐ Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment	• •					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
	1) Information Disclosure Statement(s) (PTO/SB/08) 5) Information Disclosure Statement(s) (PTO/SB/08)					
Paper No(s)/Mail Date 6)  Other:						

Application/Control Number: 10/791,050

Art Unit: 3733

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGahon et al. (6,984,245) in view of Brantigan (5,192,327).

McGahon et al. clearly discloses the claimed implant including flat sidewall portions (see Fig. 1) and holes (e.g. 40) therein offset by about 30 degrees. The implant is made of bone (para. 4). At least one of the holes is smooth. However, the other two holes are threaded. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the holes as smooth holes instead of as threaded holes, as the two are known equivalents in the art to provide more options in terms of retaining and positioning implants. For example, Brantigan shows that a threaded hole and corresponding threaded tool can be replaced by a pair of unthreaded holes and a tool with pins (cf., Fig. 13 and 14 and col. 6, line 62 - col. 7, line 6). The implant of McGahon is considered to have a sufficiently "natural shape" as set forth in the claims.

Art Unit: 3733

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGahon et al. (6,984,245) in view of Ferreira et al. (2003/0069640).

McGahon et al. disclose the claimed invention except for the cuts being of a concentric shape. Ferreira et al. disclose a similar implant 10 having cuts provided in a concentric shape to enhance bone fusion and resist migration and retropulsion in all directions (see, e.g., para. 2 and Fig. 9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the implant of McGahon et al. with cuts of a concentric shape, in view of Ferreira et al., in order to enhance bone fusion and resist migration and retropulsion in all directions.

### Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/791,050

Art Unit: 3733

Page 4

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Comstock whose telephone number is (571) 272-4710. Please leave a detailed voice message if examiner is unavailable. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Comstock

EDUARDO C. ROBERT SUPERVISORY PATENT EXAMINES